Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 11. (Cancelled)

12. (Currently Amended) A shower plate having a plurality of ejection holes adapted to eject a gas, wherein:

each ejection hole has a portion, on the side where the gas flows into the hole, having a width which is more than 0.5 mm and is not more than 5 mm and a portion, on the side where the gas flows out of the hole, having a width which is not less than 0.02 mm and is not more than 0.5 mm,

~~each of the plurality of ejection holes increase in diameter as going outward of the shower plate,~~

~~each of the plurality of ejection holes is configured in such a way that a diameter of the ejection hole, on the side where the gas flows out of the hole, is twice or less a plasma sheath thickness (d),~~

$$d = 1.307 \times \lambda_D \left[\frac{1}{2} \left\{ 1 + \ln\left(\frac{m_i}{2\pi m_e} \right) \right\} \right]^{\frac{3}{4}}$$

~~, wherein m_i and m_e represent a plasma ion mass and an electron mass, respectively, and~~

$$\lambda_D = \sqrt{\frac{\varepsilon_0 k T_e}{n_e e^2}}$$

~~, wherein ϵ_0 represents a permittivity of free space, k a Boltzmann's constant, T_e an electron temperature, n_e a plasma electron density, and e a unit charge~~

the number y of gas ejection holes per unit area is given by a quadratic curve of a distance x from a center of the shower plate, and

the quadratic curve is $y = 0.0173x^2 + 5.3574 x + 71.517$.

13. (Previously Presented) A shower plate according to claim 12, wherein said portion having the width which is not less than 0.02 mm and is not more than 0.5 mm has a length of 0.2 mm to 2 mm.

14. (Previously Presented) A shower plate according to claim 13, wherein said shower plate has a thickness of at least 20 mm.

15. - 17. (Cancelled)

18. (Previously Amended) A shower plate according to claim 12, wherein the peripheral portion of the surface of said shower plate on the side where the gas flows out is projected over the center portion thereof.

19. (Withdrawn) A shower plate according to claim 12, wherein the peripheral portion of said shower plate has a thickness greater than that of the center portion.

20. - 27. (Cancelled)

28. (Withdrawn - Currently Amended) A plasma processing apparatus comprising the shower plate according to any one of claim 12 ~~claims 9, 12, and 22~~.

29. (Withdrawn - Currently Amended) A product manufacturing method comprising carrying out a process using the shower plate according to any one of claim 12 ~~claims 9, 12, and 22~~, thereby manufacturing a semiconductor device.

30. - 31. (Cancelled)

32. (Withdrawn) A product manufacturing method comprising carrying out a process using the shower plate according to claim 14, thereby manufacturing a liquid crystal display device or an organic EL display device.

33. - 34. (Cancelled)

35. (Previously Presented) A shower plate according to claim 12, wherein the diameter of said plurality of ejection holes increase in the range of 0.1 to 0.11 mm as going outward of the shower plate.